

**BEFORE THE**  
**UNITED STATES HOUSE OF REPRESENTATIVES**  
**COMMITTEE ON ENERGY AND COMMERCE**

**TESTIMONY**  
**OF THE**  
**HONORABLE J. PETER LARK**  
**CHAIR**  
**MICHIGAN PUBLIC SERVICE COMMISSION**

**ON**

**SEPTEMBER 3, 2003**

Summary of Remarks by  
The Honorable J. Peter Lark, Chairman  
Michigan Public Service Commission  
Before the  
U.S. House of Representatives  
Committee on Energy and Commerce

September 3, 2003

- A safe, reliable, and efficient electric utility industry is critical to the personal and economic health of this Nation. The secure, coordinated, reliable, and economic operation of the Nation's transmission system is requisite to maintaining the operation of the electric utility industry.
- An electric utility industry where reliability rules are voluntary with no enforceable oversight is not acceptable.
- A balkanized regional wholesale market for electricity, where some utilities are in and some are out; where more than one Regional Transmission Organization is operating in a single discrete geographic area; and where reliability and market rules are unclear and unenforceable does not work.
- There must be certainty in the operation of the transmission grid, and that cannot be achieved where reliability rules are optional and Regional Transmission Organization membership is voluntary.
- The U.S. Congress must pass legislation that will create a system of mandatory and enforceable reliability rules applicable to all users, owners and operators of the transmission network.
- The North American Electric Reliability Council, with the input of stakeholders, is the best candidate for developing reliability rules. However, the Federal Energy Regulatory Commission should be given authority to approve and enforce the rules, including the ability to impose sanctions.
- Reliability coordination should be administered through Regional Transmission Organizations.
- The U.S. Congress must support the Federal Energy Regulatory Commission's initiative to require transmission owners to join Regional Transmission Organizations, where the Federal Energy Regulatory Commission deems it appropriate and necessary.

Mr. Chairman and Members of the Committee:

My name is J. Peter Lark and I serve as Chairman of the Michigan Public Service Commission. I am very pleased to have this opportunity to address this Committee today, although I wish it were under different circumstances.

The topic of today's hearing, "Blackout 2003: How Did It Happen and Why?" allows exploration of some of the complex issues involved with keeping the nation's lights on. But it's much more than that. A safe, reliable electric utility industry is the heart that pumps America's blood. It was recently stated that the electricity business accounts for only two percent of the Nation's economy. But the other ninety-eight percent relies one hundred percent on the reliable and economic operation of that two percent. We are occasionally reminded, as we were on August 14<sup>th</sup>, just how significant the loss of electricity can be to our economy and to our daily lives.

As you well know, Michigan was one of the State's that was hit hard by the blackout on August 14<sup>th</sup>. More than 2 million utility customers lost electricity on that day, the majority of them on the Detroit Edison utility system, which lost power to all of its customers for the first time in the company's long history. Detroit Edison estimates that about 6.1 million people lost power. The City of Detroit, and much of the southeast region of Michigan, was without electricity and other essential services such as water and sewer. The effect of the blackout on Michigan's residential, business, and major industrial electric users was devastating. For small and medium-sized business operations, the loss of revenue for even a single day can have dire implications. And the effect on the general citizenry cannot be downplayed. Although we are still in the process of assessing the damage, we have an initial estimate of the direct cost of the

emergency to state and local government of approximately \$20 million. In addition, we know that Detroit Edison claims \$35 to \$40 million in losses. Over 70 manufacturing companies in Michigan were forced to shut down. Facilities such as hospitals and nursing homes were left scrambling to provide care to those in need. In short, we cannot afford to have this kind of failure on our electric system happen again. For every story we heard of how some people found creative ways to make the best of a bad situation, there were countless others for whom the loss of electricity meant the loss of essential services.

It is incumbent that we take the steps necessary to ensure that future blackouts do not occur.

**What were the specific factors and events leading up and contributing to the blackouts of August 14?**

The Michigan PSC has initiated an investigation into this matter (Case No. U-13859), as has the U.S. Department of Energy in conjunction with our Canadian counterparts, so I would like to reserve a final determination on the cause of the blackout pending the outcome of the investigations. While we believe we know the sequence of events that resulted in the power outage – power plants and transmission lines tripping off - we do not know why those events occurred, and I believe we need to await the outcome of the pending investigations before jumping to conclusions.

What we do know is that, based on information provided by our utilities, our transmission companies, and through other accounts, there is a strong likelihood that the outage can be traced to at least a couple of factors. None of these probable causes

necessarily represents the smoking gun; but rather, one needs to look at the entire set of events, and the existing systems that allowed them to get to a point of criticality, before reaching a conclusion on the causes of the blackout.

One apparent contributing factor appears to be a communication failure.

Michigan's utilities and owners of the state's transmission system have stated that they had no warnings that there were problems on the system. To the extent other utilities were experiencing difficulties, those utilities failed to offer even a "heads up" to their neighboring utility systems. With even a little warning, safeguards could have been put in place that may have minimized, or even prevented, the outage.

The International Transmission Company has traced the timeline on actions that contributed to the blackout back to 1 hour and 5 minutes before it occurred. While ITC was able to develop and provide this information to us after the outage, it is important to understand that ITC was unaware of what was happening during that period. Both ITC and Detroit Edison tell us they had no idea there were problems on the grid until 2 minutes before power went out in Michigan when power flowing from Michigan to Ohio jumped by 2,000 MW in 10 seconds. ITC describes this as the point of no return. One-and-one-half minute later, power flowing into Michigan from Ontario jumped by 2,600 MW. Thirty-seconds later, Detroit Edison's system was dead.

Also cited in various accounts is power line failure, which may be attributed to, among other things, inadequate maintenance. Certain power line failures on August 14<sup>th</sup>, however, appear to have been due to overloading. How and why line maintenance was allowed to lapse to a breaking point, or why power was redirected to lines incapable of handling the added capacity are questions that I cannot answer at this moment, although I

suspect the extensive investigations currently underway will give us a precise set of factors and events that caused the blackout.

Last week Michehl Gent, who serves as the President of the North American Electric Reliability Council, was quoted in an article that ran in an August 26, 2003 issue of the Toronto Sun, that he believes rules “were willfully broken” on August 14<sup>th</sup> and that “happens more or less routinely.” That rules are broken routinely with no ability of any agency to enforce the rules on the transmission grid is a recipe for disaster. Plainly, a lack of enforceable standards for the reliable operation of the transmission system was a significant contributor to the blackout.

Moreover, Michigan’s transmission utilities chose to join a FERC-approved Regional Transmission Organization known as the Midwest Independent System Operator. MISO’s obligation is to help control movement of power across the grid, and ensure that the situation that occurred on August 14 does not happen. However, the federal government does not mandate participation in an RTO, and MISO possesses no command and control requirements to ensure reliability. Even more important, because membership in an RTO is not mandated, some of Michigan’s most critical partners – utilities in Ohio and Illinois - are missing from the MISO’s membership.

#### **Which systems operated as designed and which systems failed?**

It is my expectation that the answer to this question will be clearly explained in the reports that will come out of the investigations presently underway. While I am reluctant to speculate as to those systems that worked and those that did not, it is clear that the cascading outage stopped its westward travel after coursing through Michigan.

Thankfully, millions of Michigan's utility customers were protected from the blackout, as well as those customers in states to the west of us.

### **What lessons were learned as a result of the blackouts?**

While I believe there are a number of valuable lessons that will become apparent the further we get into our investigation, a couple of thoughts clearly stand out. First, an electric utility industry where reliability rules are voluntary with no enforceable oversight is not acceptable. The necessity of maintaining a safe, reliable and efficient electric transmission system should be critically apparent to all as a result of this blackout.

Second, a balkanized regional wholesale market for electricity, where some utilities are in and some are out; where more than one RTO is operating in a single discrete area; and where rules are unclear and unenforceable, does not work. There must be certainty in the operation of the transmission grid, and that cannot be achieved where reliability rules are optional, and RTO membership is voluntary. Far too much is at stake to have a transmission system that allows a single utility to jeopardize the safe, reliable and economic electric utility operations of entire regions of the country.

### **How can similar incidents in the future be prevented?**

First, Congress must pass legislation that will create a system of mandatory and enforceable reliability rules applicable to all users, owners and operators of the transmission network.

Reliability rules should be mandatory throughout the industry within the footprint of the North American Electric Reliability Council, which includes Canada. Reliability

rules must be enforceable and must include the ability to impose sanctions on market participants that violate the rules.

The security and reliability of the interstate electric transmission system is unmistakably under the purview of the federal government. Yet, the Chairman of the FERC has stated that “right now, there is no federal regulatory authority over reliability.” This deficiency must be eradicated by passing legislation that requires enforceable standards for the safe and reliable operation of the nation’s power grid.

The NERC is the best candidate for developing reliability rules. The NERC currently has such responsibility and is best positioned to do the job effectively. However, oversight of the development of the reliability rules should be given to the FERC.

Reliability coordination and enforcement functions should be outside of the NERC, due to the potential conflicts between the financial interests of the utilities who constitute NERC’s membership and reliability decisions. Coordination of the grid should be administered through an independent and strong RTO, while enforcement authority and the ability to impose sanctions should be vested in the FERC.

Second, Congress must support the FERC’s initiative to require transmission owners to join RTOs, at least in those regions where RTOs are recognized and either fully operational, or moving toward full operation.

While I recognize that some parts of the country are opposed to mandating RTOs, in the Midwest and throughout the Northeast, strong RTOs are necessary. The transmission grid in these regions is highly interconnected and regionally responsive. Coordination of the grid is at the heart of preventing problems and RTOs must have this



reliability coordination function. In these regions RTOs are well along in the developmental process. Backing off now would be a major setback to both economic efficiency gains and regional reliability improvements.

In conclusion, whether we learn that the causes were systemic or human error, mechanical or electronic, an obvious starting point to address the problem is the passage of legislation that requires enactment of mandatory and enforceable standards and rules for the safe and reliable operation of the Nation's transmission grid. I urge Congress to act quickly to address these problems and meet the need that was so clearly demonstrated on August 14, 2003.

Thank you for the opportunity to share these comments with you.